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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/533,078	04/28/2005	Shunsuke Ishii	P27813	2400	
7055 GREENBLUM	7055 7590 07/02/2007 GREENBLUM & BERNSTEIN, P.L.C.			EXAMINER	
1950 ROLANI	CLARKE PLACE	•	EPPS FORD, JANET L		
RESTON, VA 20191		•	ART UNIT	PAPER NUMBER	
			1633		
			NOTIFICATION DATE	DELIVERY MODE	
•			07/02/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com pto@gbpatent.com

Office Action Summary		Application No.	Applicant(s)				
		10/533,078	ISHII ET AL.				
		Examiner	Art Unit				
		Janet L. Epps-Ford	1633				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) 又	Responsive to communication(s) filed on 25 A	pril 2005					
		action is non-final.					
·	Since this application is in condition for allowar		secution as to the merits is				
	closed in accordance with the practice under E						
Dispositi	ion of Claims						
4)⊠	Claim(s) <u>1-25</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.						
6)[6) Claim(s) is/are rejected.						
	Claim(s) is/are objected to.						
_	8) Claim(s) 1-25 are subject to restriction and/or election requirement.						
Applicati	on Papers	, and the second se					
9)☐ The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
	Acknowledgment is made of a claim for foreign	priority under 35 H.S.C. & 110/a\	-(d) or (f) :				
a)[☐ All b)☐ Some * c)☐ None of:	priority under 35 0.5.C. § 119(a)	-(a) or (i).				
/-							
	To take the priority documents have been received.						
	 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
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Attachment	• •						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) A) Interview Summary (PTO-413) Paper No(s)/Mail Date.							
3) 🔲 Inforn	Information Disclosure Statement(s) (PTO/SB/08) 5) ☐ Notice of Informal Patent Application						
Papei	No(s)/Mail Date	6)					
Patent and Tr	adomed Office						

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DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12, and claim 25, drawn to a ds-RNA expression vector and an animal cell expressing the vector.

Group II, claim(s) 13-24, drawn to a target gene knock down animal, and method of making.

- 2. The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I is drawn to a distinct product than that set forth in Group II. As per 37 CFR § 1.475(c) if an application contains more than one category of invention as set forth in 1.475(b), unity of invention might not be present. In the instant case, the claims are directed to multiple products, and a method of producing one of these products. It is therefore concluded that the claims are directed to multiple categories of invention, and therefore unity of invention is not present.
- § 1.475 Unity of invention before the International Searching Authority, the International Preliminary Examining Authority and during the national stage.
- (a) An international and a national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention"). Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.
- (b) An international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:
- (1) A product and a process specially adapted for the manufacture of said product; or

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(2) A product and process of use of said product; or

- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.
- (c) If an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present.
- (d) If multiple products, processes of manufacture or uses are claimed, the first invention of the category first mentioned in the claims of the application and the first recited invention of each of the other categories related thereto will be considered as the main invention in the claims, see PCT Article 17(3)(a) and § 1.476(c).
- (e) The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.
- 3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

SEQ ID NO: 2, 5, and 6

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

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are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: Claims 1-8, and 10-25.

- 5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:
- 6. In regards to "Markush Practice", as defined by PCT Rule 13.2, unity of invention:
 - (a) When the Markush grouping is for alternatives of chemical compounds, they are regarded as being of a similar nature where the following criteria are fulfilled:
 - (A) all alternatives have a common property or activity, and
 - (B)(1) a common structure is present, that is, a significant structural element is shared by all of the alternatives, or
 - (B)(2) in cases where the common structure cannot be the unifying criteria, all alternatives belong to a recognized class of chemical compounds in the art to which the invention pertains.
- 7. Each sequence (SEQ ID NO: 2, 5-6) represents a loop spacer region, however the recited sequences do not share a common structure, moreover the recited sequences do not appear to an art-recognized class of compounds. Therefore the sequences of SEQ ID NO: 2, 5, and 6 lack unity of invention.
- 8. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the

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requirement be traversed (37 CFR 1.143) and (ii) identification of the claims. encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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10. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Janet L. Epps-Ford whose telephone number is 571-

272-0757. The examiner can normally be reached on M-F, 10:00 AM through 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Woitach can be reached on 571-272-0739. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Janet L. Epps-Ford/ Primary Examiner Art Unit 1633

JLE